What works for whom and in which circumstances?

A realist evaluation of a complex intervention for pregnant women with obesity

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Certificate of original authorship

I certify that the work in this thesis has not previously been submitted for a degree nor has it been submitted as part of requirements for a degree except as fully acknowledged within the text.

I also certify that the thesis has been written by me. Any help that I have received in my research work and the preparation of the thesis itself has been acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

Jane Raymond
10 May 2016

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Conference Presentations

Raymond, J. (2008). *Layers of Evidence: a Contemporary Debate on Obesity in Pregnancy* NSW Midwives Association conference, Blue Mountains, Australia

Raymond, J. Homer, C (2009). *Maternal Obesity: an Opportunity for Promoting Normal Birth.* Normal Labour and Birth 4th Research Conference, University of Central Lancashire, UK

Raymond, J. (2011). *Motivating Women to Take Hold of their Future.* A Midwifery Odyssey: ACM 17th National Conference, Sydney, Australia

Raymond, J., Homer, C.E., Davis, D. (2013). *The What, Who and Why: Weight Management Support for Obese Women during Pregnancy*. ACM 18th National Conference, Hobart, Australia

Raymond, J., Homer, C.E., Davis, D. (2014). *The What, Who, and Why: Weight Management Support to Improve Perinatal Outcomes for Obese Women*. The International Confederation of Midwives 30th Triennial Congress, Prague, Czech Republic

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Abstract

Background

Maternal obesity (BMI≥30kg/m²) is a global public health concern, impacting negatively on the health of women and their babies. Women who are obese are more likely than women of normal weight (BMI<25kg/m²) to gain excessive weight during pregnancy, increasing their risk of adverse outcomes. Evidence supports the view that gestational weight gain can be influenced through lifestyle intervention, but few antenatal services with this specific aim exist in Australia. This study describes a realist evaluation of a complex healthcare intervention designed to support obese women to achieve a healthy weight gain during pregnancy.

Setting

The intervention was introduced simultaneously in 2 locations in Sydney, Australia and these provided comparative case studies for the evaluation. Antenatal care was provided in a group setting, and focussed on supporting obese pregnant women to achieve a 'healthy' gestational weight during pregnancy, according to the Institute of Medicine gestational weight gain guidelines.

Design

A theory-driven evaluation approach, employing the realist evaluation framework, was used to develop theory around what worked for whom and in which circumstances, for clinicians, managers and women who participated in the intervention. The intervention strategies were supported by initial theory (self-efficacy), described by Context-Mechanism-Outcome (CMO) configurations. These configurations were examined and refined during analysis, enabling the development of middle range theory.

Methods

A mixed method approach was utilised, employing both quantitative and qualitative data. The analysis involved a two-phase sequential process; comparative analysis followed by thematic analysis.

Findings

The findings highlighted that context has a strong influence on outcomes, and that unseen mechanisms can act as both barriers and enablers. Self-efficacy does play an important part in predicting positive gestational weight gain behaviour, for both clinicians and obese pregnant women. However, the refined theory underpinning the intervention was more complex than originally hypothesised. A theoretical model was developed to describe the interplay between intention, ability and opportunity in predicting individuals' response to the intervention and the possibility of change. The Theory of Planned Behaviour and Social Learning Theory are the middle range theories underpinning this model.

Implications for practice

Group antenatal care designed to support women to achieve a healthy gestational weight gain has not previously been identified as an intervention to address the risks presented by maternal obesity. The theoretical model developed through the process of realist evaluation highlights key features that would enable a similar intervention to 'work' in an alternative setting.